

SYSTEM AND METHOD FOR CHARACTERIZATION
OF THIN FILMS

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Abstract of the Invention

Characterization of a sample, e.g., determination of a component's
concentration in a thin film, may be attained by providing calibration information
representative of surface spectrum measurements for a plurality of samples correlated
with depth profile information for the plurality of samples. The plurality of samples are
10 formed under a same set of process conditions. One or more surface spectrum
measurements are provided for a sample to be characterized that also was formed under
the same set of process conditions. At least one characteristic of the sample to be
characterized (e.g., concentration of a component) is determined based on the one or
more surface spectrum measurements for the sample to be characterized and the
15 calibration information.

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Sue Dombroske
(Name)

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